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PTO/SB/05 (11-00)  
Approved for use through 10/31/2002. OMB 0651-0032  
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# UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No. 1406/21

First Inventor Thomas Ferianz

Title BROADBAND DRIVER

Express Mail Label No. EL863577295US

## APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original and a duplicate for fee processing)
2. ☐ Applicant claims small entity status.  
See 37 CFR 1.27.
3. ☒ Specification [Total Pages 17]  
(preferred arrangement set forth below)
  - Descriptive title of the invention
  - Cross Reference to Related Applications
  - Statement Regarding Fed sponsored R & D
  - Reference to sequence listing, a table, or a computer program listing appendix
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 3]
5. Oath or Declaration [Total Pages 2]
  - a. ☒ Newly executed (original or copy)
  - b. ☐ Copy from a prior application (37 CFR 1.63 (d))  
(for continuation/divisional with Box 18 completed)
    - i. ☐ **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s)  
named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
6. ☐ Application Data Sheet. See 37 CFR 1.76

## ADDRESS TO:

Assistant Commissioner for Patents  
Box Patent Application  
Washington, DC 20231

7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
  - a. ☐ Computer Readable Form (CRF)
  - b. Specification Sequence Listing on:
    - i. ☐ CD-ROM or CD-R (2 copies); or
    - ii. ☐ paper
  - c. ☐ Statements verifying identity of above copies

## ACCOMPANYING APPLICATION PARTS

9. ☐ Assignment Papers (cover sheet & document(s))
10. ☐ 37 CFR 3.73(b) Statement of Power of Attorney  
(when there is an assignee)
11. ☐ English Translation Document (if applicable)
12. ☒ Information Disclosure Statement (IDS)/PTO-1449 ☒ Copies of IDS Citations
13. ☒ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)  
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s)  
(if foreign priority is claimed)
16. ☐ Request and Certification under 35 U.S.C. 122  
(b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
17. ☒ Other: Check for \$710.00.....

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP)

of prior application No.: \_\_\_\_\_ / \_\_\_\_\_

Prior application information:

Examiner \_\_\_\_\_

Group Art Unit: \_\_\_\_\_

For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

## 19. CORRESPONDENCE ADDRESS

☒ Customer Number or Bar Code Label

(Insert Customer Number or Bar Code Label here)

or ☐ Correspondence address below

Name

25297

PATENT TRADEMARK OFFICE

Address

City

State

Zip Code

Country

Telephone

Fax

Name (Print/Type)

Richard E. Jenkins

Registration No. (Attorney/Agent)

28,428

Signature

Richard E. Jenkins

Date

10-3-01

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# FEE TRANSMITTAL for FY 2002

Patent fees are subject to annual revision.

## Complete if Known

Application Number	
Filing Date	
First Named Inventor	Thomas Ferianz
Examiner Name	
Group Art Unit	
Attorney Docket No.	1406/21

TOTAL AMOUNT OF PAYMENT (\$)**740.00**

## METHOD OF PAYMENT

1. ☐ The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:

Deposit Account Number	50-0426
Deposit Account Name	Jenkins & Wilson

☒ Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17

☐ Applicant claims small entity status. See 37 CFR 1.27

2. ☒ Payment Enclosed:

☒ Check ☐ Credit card ☐ Money Order ☐ Other

## FEE CALCULATION

### 1. BASIC FILING FEE

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
101 740	201 370	Utility filing fee	740.00
106 330	206 165	Design filing fee	
107 510	207 255	Plant filing fee	
108 740	208 370	Reissue filing fee	
114 160	214 80	Provisional filing fee	

SUBTOTAL (1) (\$)**740.00**

### 2. EXTRA CLAIM FEES

Total Claims	Extra Claims	Fee from below	Fee Paid
16	-20** = 0	18	0.00
1	-3** = 0	84	0.00
Independent Claims			
Multiple Dependent			

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description
103 18	203 9	Claims in excess of 20
102 84	202 42	Independent claims in excess of 3
104 280	204 140	Multiple dependent claim, if not paid
109 84	209 42	** Reissue independent claims over original patent
110 18	210 9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$)**0.00**

\*\*or number previously paid, if greater; For Reissues, see above

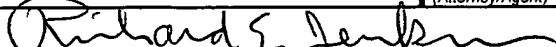
## FEE CALCULATION (continued)

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
105 130	205 65	Surcharge - late filing fee or oath	0.00
127 50	227 25	Surcharge - late provisional filing fee or cover sheet	0.00
139 130	139 130	Non-English specification	0.00
147 2,520	147 2,520	For filing a request for ex parte reexamination	0.00
112 920*	112 920*	Requesting publication of SIR prior to Examiner action	0.00
113 1,840*	113 1,840*	Requesting publication of SIR after Examiner action	0.00
115 110	215 55	Extension for reply within first month	0.00
116 400	216 200	Extension for reply within second month	0.00
117 920	217 460	Extension for reply within third month	0.00
118 1,440	218 720	Extension for reply within fourth month	0.00
128 1,960	228 980	Extension for reply within fifth month	0.00
119 320	219 160	Notice of Appeal	0.00
120 320	220 160	Filing a brief in support of an appeal	0.00
121 280	221 140	Request for oral hearing	0.00
138 1,510	138 1,510	Petition to institute a public use proceeding	0.00
140 110	240 55	Petition to revive - unavoidable	0.00
141 1,280	241 640	Petition to revive - unintentional	0.00
142 1,280	242 640	Utility issue fee (or reissue)	0.00
143 460	243 230	Design issue fee	0.00
144 620	244 310	Plant issue fee	0.00
122 130	122 130	Petitions to the Commissioner	0.00
123 50	123 50	Processing fee under 37 CFR 1.17(q)	0.00
126 180	126 180	Submission of Information Disclosure Stmt	0.00
581 40	581 40	Recording each patent assignment per property (times number of properties)	0.00
146 740	246 370	Filing a submission after final rejection (37 CFR § 1.129(a))	0.00
149 740	249 370	For each additional invention to be examined (37 CFR § 1.129(b))	0.00
179 740	279 370	Request for Continued Examination (RCE)	0.00
169 900	169 900	Request for expedited examination of a design application	0.00
Other fee (specify)			0.00

\*Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$)**0.00**

## SUBMITTED BY

Complete (if applicable)

Name (Print/Type)	Richard E. Jenkins	Registration No. (Attorney/Agent)	28,428	Telephone	001.919.493.8000
Signature		Date	10-3-01		

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10-9-01

A

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October 3, 2001

"Express Mail" mailing number EL863577295US

Date of Deposit October 3, 2001

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail to Addressee" service under 37 C.F.R. 1.10 on the date indicated above and is addressed to the Commissioner for Patents, Washington, D.C. 20231  
Robin E. Leigh

*Am E Leigh*

Commissioner for Patents  
BOX PATENT APPLICATION  
Washington, D.C. 20231

Re: U.S. Patent Application for  
BROADBAND DRIVER  
based on German Application No. 10049331.9 filed 10/05/00  
Our File No. 1406/21

Sir:

Please find enclosed the following:

1. A U.S. patent application for BROADBAND DRIVER (17 pages);
2. Three (3) sheets of formal drawings (3 pages);
3. An unexecuted Declaration (2 pages);
4. Preliminary Amendment (5 pages);
5. Information Disclosure Statement with Form PTO/SB/08B and copy of cited reference;
6. Utility Patent Application Transmittal (Form PTO/SB/05; 1 page);
7. Fee Transmittal (Form PTO/SB/17; 1 page) in duplicate;
8. A check in the amount of \$710.00 to cover the application filing fee;

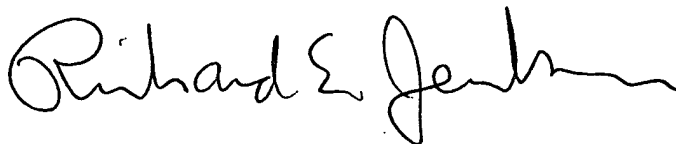
Commissioner for Patents  
October 3, 2001  
Page 2

9. A return-receipt postcard to be returned to our offices with the U.S. Patent and Trademark date stamp thereon; and
10. A Certificate of Express Mail No.: EL863577295US.

Please contact our offices if there are any questions with respect to this matter.

Respectfully submitted,

JENKINS & WILSON, P.A.



Richard E. Jenkins  
Registration No.: 28,428

REJ/lsg

Enclosures



25297

PATENT TRADEMARK OFFICE

## Reference list

- 1 Broadband driver
- 2 Signal input
- 3 Signal input
- 7 Signal input
- 12 Signal output
- 13 Transmission channel
- 14 Summation circuit
- 15 Line
- 16 Line
- 17 Line
- 18 Signal input
- 19 First broadband driver circuit
- 20 Signal output
- 21 Line
- 22 Node
- 23 Line
- 24 Second broadband driver circuit
- 25 Signal input
- 25a Output resistor
- 26 Line
- 27 Signal output
- 27a High-pass filter
- 28 Line
- 29 Input resistor
- 30 Line
- 31 Non-inverting input
- 32 Operational amplifier
- 33 Power supply connections
- 34 Power supply connections
- 35 Signal output
- 36 Line
- 37 Output resistor
- 38 Branch node
- 39 Negative-feedback line
- 40 Inverting signal input
- 41 Line
- 42 Positive-feedback line

43 Signal input  
44 Positive-feedback circuit  
45 Output  
46 Line  
47 Node  
48 Line  
49 Non-inverting signal input  
50 Operational amplifier  
51 Power supply connection  
52 Power supply connection  
53 Signal output  
54 Signal line  
55 Branch node  
56 Feedback line  
57 Inverting signal input  
58 Capacitor  
59 Signal input  
60 Signal preamplifier  
61 Fully differential operational amplifier  
62 Non-inverting signal input  
63 Inverting signal input  
64 Common-mode signal line  
65 Inverting signal output  
66 Non-inverting signal output  
67 Power supply connection  
68 Power supply connection  
69 Input resistor  
70 Line  
71 Negative-feedback resistor  
72 Signal node  
73 Signal node  
74 Line  
75 Line  
76 Line  
77 Node  
78 Capacitor  
79 Resistor  
80 Resistor  
81 Transformer circuit

```

82      Primary coil
83      Secondary coil
84      Line
85      Capacitor

```

# Translator's Report/Comments

Your ref: S1513GC/rfu

Your order of (date): 9/19/01

In translating the above text we have noted the following apparent errors/unclear passages which we have corrected or amended:

Page/para/line*	Comment
Page 6 / line 30	The original document reads "input signal", but I believe this should read "signal input" instead.
Page 8 / line 13	The original document reads "high frequency DC components ..". I believe this should read low frequency DC components, but even this is a contradiction in terms, - I think it may mean the low-frequency components of the DC-based signal.
Page 9 / text and equations 2() & (3)	I presume the terms $f_u$ and $f_o$ appear in Fig. 4 (not enclosed with original), so I have not changed these terms to match the English.

\* This identification refers to the source text. Please note that the first paragraph is taken to be, where relevant, the end portion of a paragraph starting on the preceding page. Where the paragraph is stated, the line number relates to the particular paragraph. Where no paragraph is stated, the line number refers to the page margin line number.